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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,273	10/17/2003	Kimmo Mylly	915-005.074	3787

4955 7590 03/31/2008

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EXAMINER	
LEE, CHUN KUAN	

ART UNIT	PAPER NUMBER
2181	

MAIL DATE	DELIVERY MODE
03/31/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/688,273	MYLLY ET AL.	
	Examiner	Art Unit	
	Chun-Kuan Lee	2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 February 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,5-7,11-13 and 15-42* is/are pending in the application.

4a) Of the above claim(s) *20-31,33 and 35* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1,5-7,11-13,15-19,32,34 and 36-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

CONTINUED EXAMINATION UNDER 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/01/2008 has been entered.

RESPONSE TO ARGUMENTS

2. Applicant's arguments with respect to claims 1, 5-7, 11-13, 15-19, 32, 34, 36 and 37-42 have been considered but are moot in view of the new ground(s) of rejection. Currently claims 2-4, 8-10 and 14 are canceled, claims 20-31, 33 and 35 are withdrawn, and claims 1, 5-7, 11-13, 15-19, 32, 34, 36 and 37-42 are pending for examination.

3. In response to the applicant's arguments (on page 13, last paragraph to page 14, last paragraph) that the amended independent claims 1, 7, 13, 16, 17, 19, 32, 34, 36 and 36 rejected under 35 U.S.C. 103(a) that the combination of references do not teach the amended claimed feature that the terminal transmits a command to change the mode of the card, and the card transmit to the terminal an indication of the mode

change in response to the mode change command; applicant's arguments have fully been considered, but are not found to be persuasive.

Please note that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). As the examiner relied on the references as following for the teaching/suggesting of the above claimed feature:

Oh-Yang teaches a terminal (Fig. 1, ref. 80) transmits a command to change a mode of a card (Fig. 1, ref. 10), and the card changing the mode in response to the mode change command (col. 2, ll. 26-30; col. 3, ll. 54-59 and col. 5, l. 66 to col. 6, l. 3)

Khouli teaches transmit to a terminal (Fig. 2, ref. 212) an indication of a mode change (e.g. changing between active mode and standby mode) (Fig. 2-3 and col. 6, ll. 1-25), wherein the mode change corresponds to the change in the mode of operation of a peripheral device (e.g. card).

I. OBJECTIONS TO THE CLAIMS

4. Claim1 is objected to because of the following informalities:

in claim 1, line 9, "the card changing" should be replace with –the card changes-.

Appropriate correction is required.

II. REJECTIONS BASED ON PRIOR ART

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 7, 11, 13, 15-19, 32, 34 and 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oh-Yang et al. (US Patent 6,351,820) in view of Khouli et al. (US Patent 6,308,278).

6. As per claim 1, Oh-Yang teaches a method comprising:

transmitting a command to a card (Fig. 1, ref. 10) for changing mode of the card from a dormant mode (e.g. sleep state) to a normal mode (e.g. normal state), said card being connected to an interface of a terminal (Fig. 1, ref. 80) and said command being transmitted from the terminal via a command line of the interface (col. 2, ll. 26-30; col. 3, ll. 54-59 and col. 5, l. 66 to col. 6, l. 3) wherein the line utilized for the transferring the corresponding command is the command line; and

in response to said command, the card changes the mode from the dormant mode to the normal mode (col. 2, ll. 26-30; col. 3, ll. 54-59 and col. 5, l. 66 to col. 6, l. 3),

wherein said command is used for changing the mode of the card from the dormant mode to the normal mode or from the normal mode to the dormant mode, said command comprises at least one bit, said bit indicates whether the mode change is from the dormant mode to the normal mode or from the normal mode to the dormant

mode (col. 5, ll.15-19; col. 5, ll. 39-43 and col. 5, l. 66 to col. 6, l. 3), as the shift to sleep state command comprising the corresponding bits of command data must differ from the shift to normal command comprising the correspond bits of command data in order to properly distinguish and indicate the command for setting the sleep state flag, and

wherein the mode change in the card includes the card is in a first state after the command has been received in the card (e.g. just received the command, before processing the command) and the card is in a second state after the normal mode is in use in the card (e.g. after processing the command and operating in normal state) (col. 2, ll. 26-30 and col. 5, l. 66 to col. 6, l. 3).

Oh-Yang does not teach the method comprising:

transmitting to the terminal an indication of indicating the mode change via a data line; and

the indication of mode change is transmitted in such a manner that a state of the data line is set in a first logical state after the command has been received and the state of the data line is set in a second logical state after the normal mode is in use.

Khouli teaches a system and a method comprising:

transmitting to the terminal (Fig. 2, ref. 212) an indication (e.g. wake signals from LAN controller) of indicating the mode change (e.g. between active mode and standby mode) via a data line (Fig. 2, ref. 240) (Fig. 2-3 and col. 6, ll. 1-25); and

the indication of mode change is transmitted in such a manner that a state of the data line (Fig. 2, ref. 240) is set in a first logical state before transferring of the indication (e.g. after the command has been received, before processing of the command) and the

state of the data line is set in a second logical state after the normal mode (e.g. active mode) is in use (e.g. after processing of the command and transferring the corresponding indication) (Fig. 2-3 and col. 6, ll. 1-25), as the transferring of the indication would require the change of logical stated in the data line in order to detect the indication.

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include Khouli's data line and indication signal into Oh-Yang's method for the benefit of enabling a robust power management system, wherein the whole computer system can reduce power consumption (Khouli, col. 2, ll. 1-11 and col. 2, ll. 28-35) to obtain the invention as specified in claim 1.

7. As per claim 7, Oh-Yang teaches a system, comprising:

a terminal (Fig. 1, ref. 80), and

a card (Fig. 1, ref. 10) connected to the terminal via an interface of the terminal (Fig. 1, ref. 80) wherein said terminal comprises:

an interface controller for transferring a command via a command line of the interface to the card, for changing mode of the card from a dormant mode (e.g. sleep state) to a normal mode (e.g. normal state) (col. 2, ll. 26-30; col. 3, ll. 54-59 and col. 5, l. 66 to col. 6, l. 3), wherein the computer (Fig. 1, ref. 80) would have the corresponding interface controller for the proper transferring of the command and the transferring of the command would require the correspond command line, and wherein the card comprises:

a control device (Fig. 1, ref. 20, 12) for interpreting the command and setting the mode of the card according to the command (col. 2, ll. 26-30 and col. 4, l. 3 to col. 6, l. 3); and

changing the mode of the card in response to the command from the interface (col. 2, ll. 26-30 and col. 4, l. 3 to col. 6, l. 3),

wherein said command is used for changing the mode of the card from the dormant mode to the normal mode or from the normal mode to the dormant mode, said command comprises at least one bit, said bit indicates whether the mode change is from the dormant mode to the normal mode or from the normal mode to the dormant mode (col. 5, ll.15-19; col. 5, ll. 39-43 and col. 5, l. 66 to col. 6, l. 3), as the shift to sleep state command comprising the corresponding bits of command data must differ from the shift to normal command comprising the correspond bits of command data in order to properly distinguish and indicate the command for setting the sleep state flag, and

wherein the mode change in the card includes the card is in a first state after the command has been received in the card (e.g. just received the command, before processing the command) and the card is in a second state after the normal mode is in use in the card (e.g. after processing the command and operating in normal state) (col. 2, ll. 26-30 and col. 5, l. 66 to col. 6, l. 3).

Oh-Yang does not teach the system comprising:

a connection device for transmitting to the terminal an indication of mode change via a data line; and

the indication of mode change is transmitted in such a manner that a state of the data line is set in a first logical state after the command has been received and the state of the data line is set in a second logical state after the normal mode is in use.

Khouli teaches a system and a method comprising:

a connection device for transmitting to the terminal (Fig. 2, ref. 212) an indication (e.g. wake signals from LAN controller) of the mode change (e.g. between active mode and stand by mode) via a data line (Fig. 2, ref. 240) (Fig. 2-3 and col. 6, ll. 1-25), wherein the connection between the peripheral device and the terminal is accomplished via the connection device; and

the indication of mode change is transmitted in such a manner that a state of the data line (Fig. 2, ref. 240) is set in a first logical state before transferring of the indication (e.g. after the command has been received, before processing of the command) and the state of the data line is set in a second logical state after the normal mode (e.g. active mode) is in use (e.g. after processing of the command and transferring the corresponding indication) (Fig. 2-3 and col. 6, ll. 1-25), as the transferring of the indication would require the change of logical stated in the data line in order to detect the indication.

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include Khouli's data line and indication signal into Oh-Yang's system for the benefit of enabling a robust power management system, wherein the whole computer system can reduce power consumption (Khouli, col. 2, ll. 1-11 and col. 2, ll. 28-35) to obtain the invention as specified in claim 7.

8. As per claim 11, Oh-Yang and Khouli teach all the limitation of claim 7 as discussed above, where both further teach the system comprising wherein the interface comprises at least one card connection for connecting the card to the terminal (Oh-Yang, connection between ref. 18 and ref. 80 on Fig. 1), and

said at least one card connection comprises at least the following lines:

one data line (Khouli, Fig. 3, ref. 310, 320) for the transfer of data between the terminal and the card,

one command line for the transmission of commands from the terminal to the card and for the transmission of responses from the card to the terminal (Oh-Yang, col. 5, l. 66 to col. 6, l. 3 and Khouli, Fig. 3, ref. 236), as the command is transferred from the computer to the PC card, there must be the command line utilized for the transferring of the commands, and

one clock line (Khouli, Fig. 3, ref. 315, 325) for the transmission of a clock signal from the terminal to the card.

9. As per claims 13 and 16, Oh-Yang teaches a (memory) card comprising:

a control device (Fig. 1, ref. 20, 12) for processing a command, said command coming via a command line of an interface of a terminal (Fig. 1, ref. 80), said interface being connected to the card, for changing mode of the card from a dormant mode (e.g. sleep state) to a normal mode (e.g. normal state) (col. 2, ll. 26-30; col. 3, ll. 54-59 and

col. 4, l. 3 to col. 6, l. 3), wherein the line utilized for the transferring the corresponding command is the command line; and

changing the mode of the card in response to the command from the interface (col. 2, ll. 26-30 and col. 4, l. 3 to col. 6, l. 3),

wherein said command is used for changing the mode of the card from the dormant mode to the normal mode or from the normal mode to the dormant mode, said command comprises at least one bit, said bit indicates whether the mode change is from the dormant mode to the normal mode or from the normal mode to the dormant mode (col. 5, ll.15-19; col. 5, ll. 39-43 and col. 5, l. 66 to col. 6, l. 3), as the shift to sleep state command comprising the corresponding bits of command data must differ from the shift to normal command comprising the correspond bits of command data in order to properly distinguish and indicate the command for setting the sleep state flag, and

wherein the mode change in the card includes the card is in a first state after the command has been received in the card (e.g. just received the command, before processing the command) and the card is in a second state after the normal mode is in use in the card (e.g. after processing the command and operating in normal state) (col. 2, ll. 26-30 and col. 5, l. 66 to col. 6, l. 3).

Oh-Yang does not teach the card comprising:

a connection device for transmitting to the terminal an indication of mode change in the card to the terminal via the data line;

the indication of mode change is transmitted in such a manner that a state of the data line is set in a first logical state after the command has been received and the state of the data line is set in a second logical state after the normal mode is in use.

Khouli teaches a system and a method comprising:

a connection device for transmitting to the terminal (Fig. 2, ref. 212) an indication (e.g. wake signals from LAN controller) of the mode change (e.g. between active mode and stand by mode) via a data line (Fig. 2, ref. 240) (Fig. 2-3 and col. 6, ll. 1-25), wherein the connection between the peripheral device and the terminal is accomplished via the connection device; and

the indication of mode change is transmitted in such a manner that a state of the data line (Fig. 2, ref. 240) is set in a first logical state before transferring of the indication (e.g. after the command has been received, before processing of the command) and the state of the data line is set in a second logical state after the normal mode (e.g. active mode) is in use (e.g. after processing of the command and transferring the corresponding indication) (Fig. 2-3 and col. 6, ll. 1-25), as the transferring of the indication would require the change of logical stated in the data line in order to detect the indication.

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include Khouli's data line and indication signal into Oh-Yang's card for the benefit of enabling a robust power management system, wherein the whole computer system can reduce power consumption (Khouli, col. 2, ll. 1-11 and col. 2, ll. 28-35) to obtain the invention as specified in claims 13 and 16.

10. As per claim 15, Oh-Yang and Khouli teach all the limitations of claim 13 as discussed above, where both further teach the card comprising wherein the connection device is a bus connection block (Oh-Yang, Fig. 1, ref. 18) for transferring said change of logical stated to the terminal on the data line (Khouli, Fig. 2, ref. 240) of the interface (Khouli, col. 4, ll. 7-9 and col. 6, ll. 12-14).

11. As per claims 17 and 19, Oh-Yang teaches a terminal (mobile station) comprising:

an interface (Fig. 1, ref. 80) for connecting a card (Fig. 1, ref. 10) to the terminal (mobile station) (Fig. 1, ref. 80), said interface comprising one or more signal lines including a command line (col. 1, ll. 48-52; col. 2, ll. 26-30; col. 3, ll. 54-59 and col. 5, l. 66 to col. 6, l. 3), wherein the line utilized for the transferring the corresponding command is the command line;

an interface controller for transferring a command via the command line of the interface to the card, said command for changing mode of the card from a dormant mode (e.g. sleep state) to a normal mode (e.g. normal state) (col. 2, ll. 26-30; col. 3, ll. 54-59 and col. 5, l. 66 to col. 6, l. 3), wherein the computer (Fig. 1, ref. 80) would have the corresponding interface controller for the proper transferring of the command; and

changing the mode of the card in response to the command from the interface (col. 2, ll. 26-30 and col. 4, l. 3 to col. 6, l. 3),

wherein said command is used for changing the mode of the card from the dormant mode to the normal mode or from the normal mode to the dormant mode, said command comprises at least one bit, said bit indicates whether the mode change is from the dormant mode to the normal mode or from the normal mode to the dormant mode (col. 5, ll.15-19; col. 5, ll. 39-43 and col. 5, l. 66 to col. 6, l. 3), as the shift to sleep state command comprising the corresponding bits of command data must differ from the shift to normal command comprising the correspond bits of command data in order to properly distinguish and indicate the command for setting the sleep state flag, and

wherein the mode change in the card includes the card is in a first state after the command has been received in the card (e.g. just received the command, before processing the command) and the card is in a second state after the normal mode is in use in the card (e.g. after processing the command and operating in normal state) (col. 2, ll. 26-30 and col. 5, l. 66 to col. 6, l. 3).

Oh-Yang does not teach the system comprising:

a data line;

receiving from the card an indication of mode change via the data line;

a processor for processing changes of logical state of the data line coming from the card and relating to the mode change; and

the indication of mode change is transmitted in such a manner that a state of the data line is set in a first logical state after the command has been received and the state of the data line is set in a second logical state after the normal mode is in use.

Khouli teaches a system and a method comprising:

a data line (Fig. 2, ref. 240);

receiving from the peripheral device (card) an indication (e.g. wake signals from LAN controller) of mode change (e.g. between active mode and stand by mode) via the data line (Fig. 2, ref. 240) (Fig. 2-3 and col. 6, ll. 1-25);

a processor (Fig. 2, ref. 214) for processing changes of logical state coming from the peripheral device (e.g. card) and relating to the mode change (Fig. 2-3; col. 3, ll. 15-19 and col. 6, ll. 1-25); and

the indication of mode change is transmitted in such a manner that a state of the data line (Fig. 2, ref. 240) is set in a first logical state before transferring of the indication (e.g. after the command has been received, before processing of the command) and the state of the data line is set in a second logical state after the normal mode (e.g. active mode) is in use (e.g. after processing of the command and transferring the corresponding indication) (Fig. 2-3 and col. 6, ll. 1-25), as the transferring of the indication would require the change of logical stated in the data line in order to detect the indication.

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include Khouli's data line, processor and indication signal into Oh-Yang's system for the benefit of enabling a robust power management system, wherein the whole computer system can reduce power consumption (Khouli, col. 2, ll. 1-11 and col. 2, ll. 28-35) to obtain the invention as specified in claims 17 and 19.

12. As per claim 18, Oh-Yang and Khouli teach all the limitations of claim 17 as discussed above, where both further teach the terminal comprising wherein the terminal comprises a bus connection block (Oh-Yang, Fig. 1, ref. 18, 80) for transferring the changes of logical stated from said data line (Khouli, Fig. 2, ref. 240) to said processor (Khouli, Fig. 2, ref. 214) (Khouli, col. 4, ll. 7-9 and col. 6, ll. 12-14).

13. As per claims 32 and 34, Oh-Yang teaches a method for a mobile terminal (e.g. notebook personal computer) comprising:

an interface for connecting a card (Fig. 1, ref. 10) to a (mobile) terminal (Fig. 1, ref. 80), said interface being utilized for transmitting a command for mode change from the (mobile) terminal to the card for changing (shifting) the mode of the card from a dormant mode (e.g. sleep state) to a normal mode (e.g. normal state) (col. 1, ll. 48-52; col. 2, ll. 22-30; col. 3, ll. 54-59 and col. 5, l. 66 to col. 6, l. 3);

the card changing (shifting) from the dormant mode (e.g. sleep state) to the normal mode (e.g. normal state) in response to the command from the interface (col. 2, ll. 22-30; col. 3, ll. 54-59 and col. 5, l. 66 to col. 6, l. 3); and

the (mobile) terminal having a processor (e.g. notebook's CPU) for starting to use the card via said interface in a normal way in response to said card shifting to the normal mode (col. 2, ll. 22-30; col. 3, ll. 54-59 and col. 5, l. 66 to col. 6, l. 3), and

wherein the mode change in the card includes the card is in a first state after the command has been received in the card (e.g. just received the command, before processing the command) and the card is in a second state after the normal mode is in

use in the card (e.g. after processing the command and operating in normal state) (col. 2, ll. 26-30 and col. 5, l. 66 to col. 6, l. 3).

Oh-Yang does not teach the system comprising:

receiving an indication of mode change from the card informing the terminal that the card has shifted to the normal mode;

the indication of mode change is transmitted in such a manner that a state of a data line is set in a first logical state after the command has been received and the state of the data line is set in a second logical state after the normal mode is in use.

Khouli teaches a system and a method comprising:

receiving an indication (e.g. wake signals from LAN controller) of mode change (e.g. between active mode and stand by mode) from the peripheral device (e.g. card) informing the terminal (Fig. 2, ref. 234) that the peripheral device (e.g. card) has shifted to the normal mode (e.g. active mode) (Fig. 2-3 and col. 6, ll. 1-25); and

the indication of mode change is transmitted in such a manner that a state of a data line (Fig. 2, ref. 240) is set in a first logical state before transferring of the indication (e.g. after the command has been received, before processing of the command) and the state of the data line is set in a second logical state after the normal mode (e.g. active mode) is in use (e.g. after processing of the command and transferring the corresponding indication) (Fig. 2-3 and col. 6, ll. 1-25), as the transferring of the indication would require the change of logical stated in the data line in order to detect the indication.

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include Khouli's data line and indication signal into Oh-Yang's system for the benefit of enabling a robust power management system, wherein the whole computer system can reduce power consumption (Khouli, col. 2, ll. 1-11 and col. 2, ll. 28-35) to obtain the invention as specified in claims 32 and 34.

14. As per claim 36, Oh-Yang teaches a method comprising:

in response to a command from a terminal (Fig. 1, ref. 80) connected to a card (Fig. 1, ref. 10) via an interface of the terminal (Fig. 1, ref. 80), shifting mode of the card from a dormant mode (e.g. sleep state) to a normal mode (e.g. normal state) (col. 2, ll. 22-30; col. 3, ll. 54-59 and col. 5, l. 66 to col. 6, l. 3),

after shifting from said dormant mode to said normal mode, the card operating in said normal mode in response to said command from the interface (col. 2, ll. 22-30; col. 3, ll. 54-59 and col. 5, l. 66 to col. 6, l. 3), and

wherein the mode change in the card includes the card is in a first state after the command has been received in the card (e.g. just received the command, before processing the command) and the card is in a second state after the normal mode is in use in the card (e.g. after processing the command and operating in normal state) (col. 2, ll. 26-30 and col. 5, l. 66 to col. 6, l. 3).

Oh-Yang does not teach the method comprising:

sending an indication of mode change to the terminal indicative of said card shifting from said dormant mode to said normal mode;

the indication of mode change is transmitted in such a manner that a state of a data line is set in a first logical state after the command has been received and the state of the data line is set in a second logical state after the normal mode is in use.

Khouli teaches a system and a method comprising:

sending an indication (e.g. wake signals from LAN controller) of mode change to the terminal (Fig. 2, ref. 234) indicative of the peripheral device (card) shifting from said dormant mode (e.g. inactive mode) to said normal mode (e.g. active mode) (Fig. 2-3 and col. 6, ll. 1-25); and

the indication of mode change is transmitted in such a manner that a state of a data line (Fig. 2, ref. 240) is set in a first logical state before transferring of the indication (e.g. after the command has been received, before processing of the command) and the state of the data line is set in a second logical state after the normal mode (e.g. active mode) is in use (e.g. after processing of the command and transferring the corresponding indication) (Fig. 2-3 col. 6, ll. 1-25), as the transferring of the indication would require the change of logical stated in the data line in order to detect the indication.

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include Khouli's data line and indication signal into Oh-Yang's system for the benefit of enabling a robust power management system, wherein the whole computer system can reduce power consumption (Khouli, col. 2, ll. 1-11 and col. 2, ll. 28-35) to obtain the invention as specified in claim 36.

15. As per claim 37, Oh-Yang teaches a card (Fig. 1, ref. 10) comprising:

a control device (Fig. 1, ref. 12, 20), responsive to a mode change command from a mobile terminal (e.g. notebook personal computer 80 of Fig. 1) connected to the card via an interface (Fig. 1, ref. 80) for shifting mode of the card from a dormant mode (e.g. sleep state) to a normal mode (e.g. normal state), for setting said card to said normal mode (col. 1, ll. 48-52 and col. 4, l. 3 to col. 6, l. 3); and

changing the mode of the card in response to the mode change command from the interface (col. 2, ll. 26-30 and col. 4, l. 3 to col. 6, l. 3), and

wherein the mode change in the card includes the card is in a first state after the command has been received in the card (e.g. just received the command, before processing the command) and the card is in a second state after the normal mode is in use in the card (e.g. after processing the command and operating in normal state) (col. 2, ll. 26-30 and col. 5, l. 66 to col. 6, l. 3).

Oh-Yang does not expressly teach the card comprising:

transmitting an indication of mode change via a data line; and

the indication of mode change is transmitted in such a manner that a state of a data line is set in a first logical state after the command has been received and the state of the data line is set in a second logical state after the normal mode is in use.

Khouli teaches a system and a method comprising:

transmitting an indication of mode change (e.g. wake signals from LAN controller) via a data line (Fig. 2-3 col. 6, ll. 1-25); and

the indication of mode change is transmitted in such a manner that a state of the data line (Fig. 2, ref. 240) is set in a first logical state before transferring of the indication (e.g. after the command has been received, before processing of the command) and the state of the data line is set in a second logical state after the normal mode (e.g. wake up mode) is in use (e.g. after processing of the command and transferring the corresponding indication) (Fig. 2-3 and col. 6, ll. 1-25), as the transferring of the indication would require the change of logical stated in the data line in order to detect the indication.

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include Khouli's data line and indication signal into Oh-Yang's system for the benefit of enabling a robust power management system, wherein the whole computer system can reduce power consumption (Khouli, col. 2, ll. 1-11 and col. 2, ll. 28-35) to obtain the invention as specified in claim 36.

16. Claims 5-6, 12 and 38-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oh-Yang et al. (US Patent 6,351,820) in view of Khouli et al. (US Patent 6,308,278) as applied to claims 1, 7, 13 and 16-17 above, and further in view of Lindskog et al. (US Pub.: 2002/0132603).

17. As per claims 5-6 and 12, Oh-Yang and Khouli teach all the limitations of claims 1 and 7 as discussed above, but Oh-Yang and Khouli do not teach the method and the system comprising:

wherein after receiving said command to set the normal mode, an acknowledgement about the reception of the command is transmitted from the card to the terminal; and

wherein said terminal used is a wireless terminal provided with mobile station functions.

Lindskog teaches a system and a method comprising:

a wireless network interface card (NIC) coupled to a PC forming a mobile terminal (Fig. 2 and [0003]-[0004]); and

the NIC receiving a request from the PC to transit from a dormant state (i.e. D3) to an active state (i.e. D0) ([0079]); and

an acknowledgement is transferred to the PC in response to the request by the PC to transit from a dormant state (i.e. D3) to an active state (i.e. D0) (claim 17 on page 6).

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include Lindskog's mobile terminal and acknowledgement into Oh-Yang and Khouli's interconnecting system and method for the benefit of providing a power saving concept for the PC in a wireless local area network (WLAN) thus improving the battery lifetime of the PC (Lindskog, [0084]) to obtain the invention as specified in claims 5-6 and 12. The resulting combination of the references teaches the system and the method further comprising:

the card's the acknowledgement associated with the terminal's request to shift to normal state is transferred is transferred to the terminal; and

wherein the card coupled the terminal to form the wireless mobile terminal.

18. As per claims 38-42, Oh-Yang and Khouli teach all the limitations of claims 1, 7, 13 and 16-17 as discussed above, where Oh-Yang further teaches the method and the system comprising wherein the command comprises the one bit that indicates whether the mode change is from the dormant mode to the normal mode or from the normal mode to the dormant mode (Oh-Yang, col. 5, ll.15-19; col. 5, ll. 39-43 and col. 5, l. 66 to col. 6, l. 3), as the shift to sleep state command comprising the corresponding bits of command data must differ from the shift to normal command comprising the correspond bits of command data in order to properly indicate the command for setting the sleep state flag.

Oh-Yang and Khouli do not teach the method and the system comprising the command comprises additional one or more bits further define one or more conditions for mode change.

Lindskog teaches a system and a method comprising command comprises additional one or more bits further define one or more conditions for mode change (Fig. 2 and [0028]; [0057]; [0077]), wherein the additional bits defines the correspond power mode (e.g. D0, D1, D2, D3).

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include Lindskog's different power modes into Oh-Yang and Khouli's system and method for the benefit of providing a power saving concept for the

PC in a wireless local area network (WLAN) thus improving the battery lifetime of the PC (Lindskog, [0084]) to obtain the invention as specified in claims 38-42.

III. CLOSING COMMENTS

Conclusion

a. STATUS OF CLAIMS IN THE APPLICATION

The following is a summary of the treatment and status of all claims in the application as recommended by **M.P.E.P. 707.07(i)**:

a(1) CLAIMS REJECTED IN THE APPLICATION

Per the instant office action, claims 1, 5-7, 11-13, 15-19, 32, 34, 36 and 37-42 have received a first action on the merits and are subject of a first action non-final.

b. DIRECTION OF FUTURE CORRESPONDENCES

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chun-Kuan (Mike) Lee whose telephone number is (571) 272-0671. The examiner can normally be reached on 8AM to 5PM.

IMPORTANT NOTE

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alford Kindred can be reached on (571) 272-4037. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

March 18, 2008

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